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REMARKS

Claims 1-4 and 6-21 are pending in the present Application. Claims 14-21 have been withdrawn and Claim 1 has been amended, leaving Claims 1-4 and 6-14 for consideration upon entry of the present Amendment. Entry of this Amendment is requested since it places the Application in condition for allowance.

The Specification has been amended to correct an inadvertent typographical error. No new matter has been introduced by this amendment. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Objection to the Specification

The amendment to the Specification filed on April 5, 2004 is objected to under 35 U.S.C. § 132 because it allegedly introduces new matter into the disclosure (Office Action, p. 4). In particular, the Examiner states:

The added material which is not supported by the original disclosure is as follows: the disclosure at page 5, line 13, stating that a "vaporious halogen" may be used as an oxidative catalyst in the invention. It is the Examiner's position that the specification does not enable one having ordinary skill in the art to manufacture a conductive polymer composite using a vaporous halogen other than iodine for the reasons discussed above in section 3.

(Office Action, pp. 4-5)

Applicants respectfully traverse the objection to the specification the grounds that no new matter has been introduced into the specification. Antecedent basis for the amendment is found in Claim 9 as originally filed (now renumbered Claim 8). That claim recited, in relevant part, a method of impregnating a polymer with a "vaporious halogen". It is this term that has been incorporated *ipsis verbis* into the specification. Such incorporation accordingly cannot be new matter under 35 U.S.C. § 132. It is well established that the claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter. *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985). Applicant therefore respectfully requests reversal of the objection to the Specification on the grounds that it is not new matter.

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The Examiner's other stated reason for the objection (lack of enablement) is addressed below with respect to the rejection under 35 U.S.C. § 112, first paragraph.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph - Enablement

Claims 8-10 and 12-13 stand rejected under 35 U.S.C. § 112, first paragraph, on the basis that the specification, while being enabling for iodine vapor, allegedly does not reasonably provide enablement for all vaporous halogens. (Office Action, p. 5) In response to the Applicant's contention that no undue experimentation would be required perform the method of the invention with halogens other than iodine, the Examiner has cited cases that hold that in applications directed to inventions in arts where results are unpredictable, the disclosure of a single species may not provide an adequate basis to support a generic claim (Office Action, p. 3). The Examiner has also cited cases that hold that that the amount of guidance or direction required for enablement varies with the unpredictability of the art, and that the catalyst art in particular is a notoriously unpredictable art (Office Action, pp. 2-3)

Applicant appreciates the Examiner's detailed response, but nonetheless maintains that the present application enables use of vaporous halogens as originally filed. In particular, the Applicant brings to the Examiner's attention the article by Shenoy, et al. (Ind. Eng. Chem. Res., Vol. 41, 1484-88 (2002)), which is attached hereto. This article was published subsequent to the filing of the present application, but nonetheless may be used to provide evidence of enablement. (See MPEP 2164.05, stating that applicant may submit evidence of enablement after the filing date that demonstrates that the claimed invention works.) As disclosed in this article, bromine may be used as a catalyst in the vapor phase to catalyze the deposition of polypyrrole (see second col of p. 1484, second full paragraph).

The specification and article therefore provides evidence of the enablement of two vaporous halogens. It is not necessary, even in unpredictable arts, that the Applicant demonstrate operability of every embodiment. Accordingly, reconsideration and allowance of Claims 8-10 and 12-13 is respectfully requested.

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Claim Rejections Under 35 U.S.C. § 112, First Paragraph – Written Description

Claims 8-13 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner states

In claim 8, line 4 the newly added limitation “and in the absence of supercritical carbon dioxide” appears to be new matter. While Applicants’ specification discloses an embodiment where supercritical carbon dioxide is used, the specification does not provide support for the limitation of specifically *excluding* supercritical carbon dioxide.

(Office Action, p.6)

Applicants respectfully traverse the rejection. MPEP 2173.05(i) provides in part:

Any negative limitation or exclusionary proviso must have basis in the original disclosure. . . . Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. *Ex parte Parks*, 20 U.S.P.Q.2d 1234, 1236 (Bd. Pat. App. & Inter. 1193).

(Emphasis supplied.)

In *Ex parte Parks*, the Examiner had rejected the limitation “in the absence of a catalyst” because there was no literal statement in the specification to support the limitation. The Board held that “literal support does not, in and of itself, establish a *prima facie* case for lack of adequate descriptive support under the first paragraph of 35 U.S.C. 112.” *Id.* The Board also held that “it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an appellant had possession of the concept of what is claimed.” *Id.* Moreover, the Board of Patent Appeals & Interferences has consistently held that the specification does not require a literal statement supporting a negative limitation. In *Ex parte Kenneth E. Starling Jr., and Brian J. Love*, 1995 WL 1696871, *2 (Bd. Pat. App. & Inter. 1995), the claim language at issue was “curable without the application of any supplemental heat.” The Board held that “[a]lthough the disclosure is silent as to the use of heat, it can reasonably be said that appellants’ silence would have disclosed to one of ordinary skill in the art that the dental adhesive would have been curable in the absence of heat.” *Id.*

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Here, the originally filed disclosure would have conveyed to one having ordinary skill in the art that the applicant had possession of the concept of what is claimed, in that an ordinary person skilled in the art would have understood that supercritical carbon dioxide could be absent or present. The present specification includes examples wherein polyurethane foams are impregnated with vaporous iodine, such impregnation clearly being carried out in the absence of supercritical carbon dioxide. (Compare the examples described at page 7, line 19 to page 8, line 3, with the examples described at page 8, lines 4-15). One of ordinary skill in the relevant art would thus understand that the inventors, at the time the application was filed, had possession of an impregnation process carried out in the absence of supercritical carbon dioxide. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-3 and 6-7 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Y. Fu, D. Palo, C. Erkey, and R. Weiss "Synthesis of Conductive Polypyrrole/Polyurethane Foams via a Supercritical Fluid Process", hereinafter "Weiss et al."

As amended, Claim 1 specifically recites a method comprising impregnating a polymer composition with a halogen in a vapor phase in the absence of a volatile organic solvent. Antecedent basis for this amendment is found at least in the claims as originally filed, particularly Claim 1 and Claim 8 (Claim 9 as filed). Weiss et al. discloses use of an iron-based catalyst, $\text{Fe}(\text{CF}_3\text{SO}_3)_3$, and does not teach or suggest use of halogen in the vapor phase. Weiss et al. therefore does not anticipate or render obvious Claim 1 as amended, or any of its dependent claims.

Accordingly, Applicant respectfully requests reconsideration of the rejection of Claims 1-3 and 6-7.

Objected-to Claims 4 and 8

Applicants appreciate the Examiner's indication that the subject matter of Claims 4 and 8 would be allowable if rewritten in independent form to include all of the limitations of

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the base claim and any intervening claims. However, as set forth above, Applicants believe that all of the pending claims are allowable.

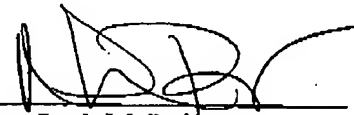
It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By



Leah M. Reimer
Registration No. 39,341

Date: September 7, 2004
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 23413